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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,351	11/13/2001	Ernesto De La Concha Estrada	12354	8191

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EXAMINER

FOE, MICHAEL I

ART UNIT	PAPER NUMBER
1732	

DATE MAILED: 01/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)	
10/010,351	DE LA CONCHA ESTRADA, ERNESTO	
Examiner	Art Unit	
Michael I Poe	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/260,742.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(e)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s) _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/260,742, filed on March 1, 1999.
2. It is noted that this application appears to claim subject matter disclosed in prior Application No. 09/260,742, filed March 1, 1999. A reference to the prior application must be inserted as the first sentence of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e) or 120. See 37 CFR 1.78(a). For benefit claims under 35 U.S.C. 120, the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. Also, the current status of all nonprovisional parent applications referenced should be included. In the instant case, although reference to the parent application is provided, the reference does not include the correct filing date of the parent application (e.g., reference states the parent application was filed on March 3, 1999 rather than on March 1, 1999) and the current status of the parent application (e.g., now abandoned). The reference to the prior application in the instant application should be amended in response to this Office action to correct the above noted deficiencies.

If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver

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of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A priority claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed claim for priority under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Drawings

3. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81. No new matter may be introduced in the required drawing.

Specification

4. The disclosure is objected to because of the following informalities: (1) "." is missing after "1999" on page 1, line 4; after "general" on page 5, line 24; after "mixtures" on page 6, line 17; after "etc" on page 8, line 17; after "approximately" on page 9, line 13; and after "pigments" on page 10, line 6; and "stores" should be "stored" on page 9, line 23.

Appropriate correction is required.

Claim Objections

5. Claims 1-9 are objected to because of the following informalities: (1) "." is missing after "inert" on page 12, line 13 in claim 1; and (2) ";" is missing after "metals" on page 12, line 8 in claim 1. Appropriate correction is required.

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Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 2 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "rice-sized" in claim 2 is a relative term which renders the claim indefinite. The term "rice-sized" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Since the applicant does not specify actual dimensions (e.g., length and diameter) that term "rice-sized" is intended to encompass and commercially available rice can have multiple different sizes, one of ordinary skill in the art would not be able to adequately determine what size would be considered "rice-sized" by the applicant. As such, one of ordinary skill in the art would not be reasonably apprised of the scope of the invention in the instant case.

Regarding claim 3, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,113,014 (Foth) in view of U.S. Patent No. 4,844,351 (Holloway).

Claims 1-3 and 7

Foth teaches a method of processing waste material including discharging waste material such as municipal wastes including garbage, rubbish, etc. (such trash may be selected from the group

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consisting of organic and inorganic waste such as glass, plastic, laminated material, diaper, wood, paper, burlap, asbestos, aluminum, non-rigid metals, grass, animals, plants, fruit, bones and food residues) onto a classifying screen to separate the material according to the bulk size of individual particles or units (collecting industrial and/or household trash); subjecting the material which passes through the classifying screen to a magnetic separate to remove all iron-containing materials and discharging the magnetizable materials for salvage (sorting rigid metals from non-recyclable trash; removing rigid metals); conveying the material which passes through both the classifying screen and the magnetic screening step to a grinding mill in which all of the particles are ground to a minimum size requirement consistent with economical operation (grinding such non-recyclable trash); feeding the material discharged from the grinding mill to a briquette press where the ground material is compressed into units in the form of relatively small briquettes; and either simultaneously with the compressing of the material into briquettes or in a subsequent step, packaging or enclosing the briquettes within a substantially air-tight covering or coating (storing or packaging such ground trash) (column 1, lines 8-12; column 1, line 54 - column 2, line 53). Note that, the step of packaging or enclosing the briquettes within a substantially air-tight covering or coating would not constitute subjecting the ground non-recyclable trash to any chemical and/or thermal treatment or additional agents to render it biologically inert as defined by the applicant's original disclosure. Note further that the storing or packaging step in applicant's claim 1 provides evidence that storing or packaging is not considered a step excluded by the "wherein" portion of claim 1.

Note that, although Foth does not specifically teach that the material which passes through both the classifying screen and the magnetic screening step is ground to rice-sized particles, Foth does teach that the material is ground to a minimum size requirement consistent with economical operation. As such, Foth recognizes that the size of the material after grinding is a result-effective variable based on the economics of the operation. Since the size of the material is a result-effective variable as recognized by Foth, one of ordinary skill in the art would have obviously determined the optimum size of the material after grinding through routine experimentation based upon the economics of the grinding operation.

Foth does not specifically teach sorting recyclable trash from non-recyclable trash; removing recyclable trash; and that the trash volume is reduced up to 80%. However, Holloway teaches a method

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for separation, recovery and recycling of plastics from municipal solid waste including introducing municipal solid waste into a pressure vessel in the presence of steam to remove rags; subjecting the resultant material to magnetic separation to remove ferrous metals (sorting rigid metal from non-recyclable trash; removing rigid metals); subjecting the resultant material to eddy current separation to remove aluminum particles (sorting rigid metal from non-recyclable trash; removing rigid metals); introducing the resultant material into a trommel in the presence of hot air to remove low density plastics and trommel rejects (sorting recyclable trash from non-recyclable trash; removing recyclable trash); and introducing the result material including organics, glass and dense materials into a stoner to separate the organic material from the remaining materials (sorting recyclable trash from non-recyclable trash; removing recyclable trash) such that the mass of the municipal solid waste is reduced by approximately 78.45% (the trash volume is reduced up to 80%) (Table 1; Figure 1). Note that a weight reduction of about 78.45% would represent a volume reduction of up to about 80%. It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made and one of ordinary skill would have been motivated to use the sorting process in the process of Foth including the removal of recyclable trash as taught by Holloway to make the process of Foth more economically and environmentally sound (see specifically column 2, lines 59-68 of Holloway).

10. Claims 4-6, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 3,113,014 (Foth) in view of U.S. Patent No. 4,844,351 (Holloway) and U.S. Patent No. 3,734,988 (Aintablian).

Claims 4-6, 8 and 9

The discussion of Foth and Holloway as applied to claim 1 above applies herein.

Foth further teaches that the method includes transferred the coated briquettes from the process site to the point of use or storage immediately after the protective coating is applied (transporting stored ground trash; unpacking said packed ground trash); exposing the coated briquettes to air upon completion of the anaerobic digestion process to remove or disintegrate the coating; and using the briquette material as a soil conditioner (column 3, lines 4-35). As discussed above with regard to claim 1,

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Foth in view of Holloway further teaches that the mass of the municipal solid waste is reduced by approximately 78.45% by the classifying operations (the trash volume is reduced up to 80%).

Foth in view of Holloway does not specifically teach using the briquettes to form an ecological mixture having the claimed compositions and using the ecological mixture to form a construction element such as those claimed. However, Aintablian teaches a process for making construction products from refuse including grinding inert refuse is ground to a fine powder; mixing the powder with fillers and binders such as hydraulic setting cements and glues (forming an ecological mixture); adding water and other chemicals as required or desired (forming an ecological mixture); forming the resultant mixture into blocks or other building materials by pressing (forming a construction element; said construction element is used to construct borders, sidewalks, avenues, contention walls or concrete plates for provisional division of roads, for filling and leveling, crockery and light constructions or buildings, for manufacturing blocks, bricks and posts); and curing the formed blocks or other building materials until a specified strength has been achieved wherein the resultant mixture comprises 100% ground inert refuse (about 10 to about 90% ground trash), 0 - 50% Plaster of Paris, 0 - 50% lime, 0 - 60% silica in the form of sand and gravel (up to 30% sand, up to 30% gravel), 0 - 50% calcium in the form of gypsum, 0 - 30% Portland cement (about 10 to about 50% of Portland cement) and 25-110% water (water as needed) (abstract, Figure 1 and column 1, line 60 - column 4, line 2; column 3, lines 7-29). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made and one of ordinary skill would have been motivated to the briquette material, after removal of the coating, from the process of Foth in view of Holloway to form construction elements as taught by Aintablian to provide additional commercial uses for the briquette material thereby expanding the profitability of the process of Foth in view of Holloway.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 5,302,331 (Jenkins) and U.S. Patent No. 4,402,751 (Wilde) have been cited of interest to show processes using trash to produce construction elements without the use of a composting step. U.S. Patent No. 5,249,690 (Patterson), U.S. Patent No. 6,279,748 B1 (Nakamura et al.) and U.S. Patent

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Publication No. 2002/0023860 A1 (Rabiei) have been cited of interest to show processes for sorting and removing metals and recyclables from trash streams. U.S. Patent No. 4,780,433 (Keller, Jr.), U.S. Patent No. 4,898,615 (Trivino Vazquez et al.), U.S. Patent No. 5,422,051 (Sawyers), U.S. Patent No. 5,851,281 (Alves) and U.S. Patent No. 5,976,435 (Djerf et al.) have been cited of interest to show additional processes using trash or waste materials to form construction elements or concrete materials. U.S. Patent No. 5,762,225 (Byrd) has been cited of interest to show the state of the art at the time the invention was made.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael I Poe whose telephone number is (571) 272-1207. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on (571) 272-1196. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1234.


Michael Poe/mip


MICHAEL COLAIANNI
PRIMARY EXAMINER